WHAT IS CLAIMED IS:

Subd2

1. A bottle closure assembly for draining a solution contained within a bottle for holding a processing solution, said bottle having a base section, a body portion extending from said base and terminating into a neck portion having an outlet through which said solution may pass, the bottle closure assembly comprising:

a seal secured to the neck portion of said bottle so as to cover said opening such that said seal will retain solution within said bottle; and

a cap member for assisting in the rupture of said seal, said cap member having a skirt for securing said cap member to said neck portion.

2. A bottle closure assembly according to claim 1 wherein said opening defines a rim of said outlet, said seal is secured to said rim for preventing liquid from being dispensed from said bottle.

3. A bottle closure assembly according to claim 1 wherein said neck portion has external threads that engage internal threads provided on said cap member.

4. A bottle closure assembly according to claim 1 wherein said cap member has a body section having internal threads for engaging external threads provided on said neck portion, and a plurality of rupture members that engages said seal upon engagement with an external probe.

5. A bottle closure assembly according to claim 4 wherein said rupture members having a shape that will substantially clear said seal at said outlet for allowing quick and easy egress of solution from said bottle.

6. A bottle closure assembly according to claim 4 wherein said rupture members have a cutting edge for assisting in rupturing said seal.

7. A bottle closure assembly according to claim 4 wherein said rupture members have a rib for engaging said probe for assisting in moving rupture members against the inside surface of said neck portion.

8. A bottle closure assembly according to claim 4 wherein at least one tie is provided for securing said rupture members together, said at least one tie being easily broken upon engagement with said probe.

9. A bottle closure assembly according to claim 5 wherein said rupture members have a thickness in the range of 0.5 mm to 2.0 mm, is made of a material comprising HDPE.

10. A bottle closure assembly according to claim 9 wherein there is provided said plurality of rupture members and each of the rupture members having a connecting hinge member that allows said rupture members to pivot approximately 90° with respect to a plain parallel to said outlet.

11. A bottle closure assembly according to claim 9 wherein a hinge radius of the range .25 mm to .4 mm is formed at the juncture of the connecting hinge and the lateral skirt.

12. A bottle closure assembly according to claim 11, wherein the connecting hinge is bordered by a hinge slot, the hinge slot having a width greater than 0 and a length greater than 0 and less than or equal to ¼ D1, where D1 is the diameter of the inside circumference of the annular surface of said cap member.

13. A bottle closure assembly according to claim 4, wherein the rupture members are in contact with the seal when the cap assembly is fully seated on the bottle neck.

14. A bottle closure assembly according to claim 4, wherein the rupture members are not in contact with the seal when the cap assembly is fully seated. The gap between the seal and the rupture members is greater than 0 inches and equal to or less than T, where T is the thickness of said rupture members.

15. A bottle closure assembly according to claim 4, wherein a space S between the rupture members is greater than 0 inches and less than T, where T is the thickness of the rupture members.

16. A bottle and bottle closure assembly for draining a solution contained within a bottle, the bottle closure assembly comprising:

a bottle for holding a processing solution, said bottle having a base section, a body portion extending from said base and terminating into a neck portion having an outlet through which said solution may pass;

a seal secured to said neck portion so as to cover said opening such that said seal will retain solution within said bottle;

a cap member for assisting in the rupture of said seal, said seal having a securing member for securing said cap member to said neck portion.

17. A bottle and bottle closure assembly according to claim 16 wherein said opening defines a rim of said outlet, said seal is secured to said rim for preventing liquid from being dispensed from said bottle.

18. A bottle and bottle closure assembly according to claim 16 wherein said neck portion has external threads that engage internal threads provided on said cap member.

19. A bottle and bottle closure assembly according to claim 16 wherein said cap member has a body section having internal threads for engaging external threads provided on said neck portion, and a plurality of rupture members that engages said seal upon engagement with an external probe.

20. A bottle and bottle closure assembly according to claim 19 wherein said rupture members having a shape that will substantially clear said seal at said outlet for allowing quick and easy egress of solution from said bottle.

21. A bottle and bottle closure assembly according to claim 19 wherein said rupture members have a cutting edge for assisting in rupturing said seal.

22. A bottle and bottle closure assembly according to claim 19 wherein said rupture members have a rib for engaging said probe for assisting in moving rupture members against the inside surface of said neck portion.

23. A bottle and bottle closure assembly according to claim 19 wherein at least one tie is provided for securing said rupture members together, said at least one tie being easily broken upon engagement with said probe.

24. A bottle and bottle closure assembly according to claim 19 wherein said rupture members have a thickness in the range of 0.5 mm to 2.0 mm, is made of a material comprising HDPE.

25. A bottle and bottle closure assembly according to claim 24 wherein there is provided said plurality of rupture members and each of the rupture members having a connecting hinge member that allows said rupture members to pivot approximately 90° with respect to a plain parallel to said outlet.

26. A bottle and bottle closure assembly according to claim 25 wherein a hinge radius of the range .25 mm to .4 mm is formed at the juncture of the connecting hinge and the lateral skirt.

27. A bottle and bottle closure assembly according to claim 26, wherein the connecting hinge is bordered by a hinge slot, the hinge slot having a width greater than 0 and a length greater than 0 and less than or equal to ¼ D1,

where D1 is the diameter of the inside circumference of the annular surface of said cap member.

28. A bottle and bottle closure assembly according to claim 19, wherein the rupture members are in contact with the seal when the cap assembly is fully seated on the bottle neck.

29. A bottle and bottle closure assembly according to claim 19, wherein the rupture members are not in contact with the seal when the cap assembly is fully seated. The gap between the seal and the rupture members is greater than 0 inches and equal to or less than T, where T is the thickness of said rupture members.

30. A bottle and bottle closure assembly according to claim 19, wherein a space S between the rupture members is greater than 0 inches and less than T, where T is the thickness of the rupture members.